

Claims

1. An electronic compressed-air system for supplying compressed-air circuits with compressed-air in vehicles with a compressed-air supply part provided with a compressor and a consumer part with a plurality of compressed-air load circuits, which are supplied with compressed-air via electrically actuatable valves and at least one load circuit of which is provided with a compressed-air accumulator, wherein the pressure in the load circuits is monitored by pressure sensors, whose electrical pressure signals are evaluated by an electronic control unit that controls the electrically actuatable valves, **characterized in that** the electrically actuatable valves (16, 18, 20, 22) of the compressed-air load circuits (26, 28, 30, 32, 34, 36) are open in the de-energized or pilot-controlled normal state.
2. A compressed-air system according to claim 1, **characterized in that** the compressed-air load circuits are provided with service-brake circuits (26, 28) with at least one compressed-air accumulator (90, 92), at least one secondary load circuit (30, 32, 34, 36) without compressed-air accumulator and a high-pressure circuit (38) without or with compressed-air accumulator, wherein the electrically actuatable valves (16, 18) of the service-brake circuits and the electrically actuatable valves (20, 22) of the secondary load circuits (30, 32, 34, 36) are open in the de-energized normal state and the electrically actuatable valve (24) of the high-pressure circuit (38) is closed in the de-energized normal state.
3. A compressed-air system according to claim 1 or 2, **characterized in that** the electrically actuatable valves are solenoid valves.

4. A compressed-air system according to claim 2, **characterized in that** the pressure level in the secondary load circuits (30, 32, 34, 36) is lower than the pressure level in the service-brake circuits (26, 28).
5. A compressed-air system according to claim 2, **characterized in that** the pressure level in the high-pressure circuit (38) is higher than the pressure level in the service-brake circuits (26, 28).
6. A compressed-air system according to claim 2 or 3, **characterized in that** a pressure-limiting valve (70) is interposed upstream from the solenoid valves (20, 22) of the secondary load circuits (30, 32, 34, 36).
7. A compressed-air system according to claim 2, **characterized in that** the solenoid valves (16, 18, 20, 22, 24) of the consumer part (6) are connected to a common compressed-air distributor line (14), to which there is connected a compressed-air supply line (40).
8. A compressed-air system according to claim 7, **characterized in that** an air dryer (44) and a check valve (46) are disposed in the compressed-air supply line (40).
9. A compressed-air system according to claim 1 or 2, **characterized in that** at least one compressed-air load circuit communicates via a data bus with the electronic control unit (84).